



Mercedes-Benz

Press
Information

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The new Mercedes-Maybach GLS

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A new form of luxury

Mercedes-Benz

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**The descriptions and data in this press kit apply to the international model range of Mercedes-Benz.
They may vary from country to country.**

More information about the official fuel consumption and the official specific CO₂ emissions of new passenger cars can be found in the publication "Leitfaden über den Kraftstoffverbrauch, die CO₂-Emissionen und den Stromverbrauch neuer Personenkraftwagen" ["Guidelines concerning the fuel consumption, CO₂ emissions and electricity consumption of new passenger cars"], available free of charge at all retailers and from the Deutsche Automobil Treuhand GmbH (www.dat.de).

Short version

The new Mercedes-Maybach GLS

A new form of luxury

Stuttgart/Guangzhou. The Mercedes-Maybach GLS 600 4MATIC (combined fuel consumption:

12.0-11.7 l/100 km; combined CO₂ emissions: 273-266 g/km)¹ represents a new form of luxury in the SUV segment. It extends the portfolio of the Mercedes-Maybach brand by combining the body design and technical basis of the GLS with the luxury of a top-class saloon car. Its spacious interior with the highest-grade materials and extremely effective noise insulation creates a stylish, cocoon-like feel-good atmosphere. From their pleasantly elevated seating position, thanks to electrically operated roller sun blinds on the two rear side windows, the passengers can decide for themselves how much of their surroundings they want to see. The AIRMATIC suspension included as standard or the optional, fully-active suspension with E-ACTIVE BODY CONTROL effectively keep the road bumps at bay. For the first time there is a dedicated Maybach drive program that ensures even more comfort in the rear. Access and egress are also highly convenient: when the doors are opened, the vehicle is lowered slightly, and an illuminated running board quickly and silently emerges on the access or egress side. The running boards are made of anodised aluminium. The V8 engine with a displacement of four litres, which can develop 410 kW (558 hp) and 730 Nm of torque, is an engine variant developed exclusively for Maybach and moves the car discreetly and powerfully. The engine is combined with the 48-volt system EQ Boost. The Mercedes-Maybach GLS 600 4MATIC will enter the market in the second half of 2020.

The Mercedes-Benz star surmounts the bonnet in the classic way, while the fine, vertical chrome struts of the Maybach radiator grille create a pinstripe effect. Effective chrome highlights around the side windows, and the chrome inserts in the side sill panels, lend dignity and elegance to the profile. The 22 or 23-inch wheels were developed exclusively for this model, with the 23-inch version echoing the pinstripe theme. The tailpipe trim elements with a small cross rib emphasise the model's identity as a Mercedes-Maybach. The same applies to the brand emblem, which is positioned at various points such as on the D-pillar. As a special, Maybach-specific feature, two-tone paintwork is planned in eight different, elegant colour combinations.

¹Figures for fuel consumption and CO₂ emissions are provisional and were determined by the Technical Service for the certification process in accordance with the WLTP test method and correlated into NEDC figures. EC type approval and a certificate of conformity with official figures are not yet available. Differences between the stated figures and the official figures are possible.

Another eye-catching feature of the Mercedes-Maybach GLS are the electrically extending running boards. They make accessing and leaving the high seating position both convenient and safe. With surfaces of anodised aluminium laced with black rubber strips, illuminated in the dark and particularly wide in the area of the rear doors, they ensure a very special visual appeal. When in their retracted state, the running boards are concealed behind the side sill panels. If a rear door is opened, the running board on the side concerned automatically swings into position in around one second. This default setting can be changed using a special menu in the MBUX infotainment system. In the interests of spaciousness in the rear, the Mercedes-Maybach GLS is only available with two seat rows.

The equipment features: luxury, leather and reclining seats

The appointments of the Mercedes-Maybach GLS 600 4MATIC are already decidedly luxurious as standard. The two outer rear seats can be electrically converted into reclining seats. Padded areas and the dashboard are finished in fine nappa leather as standard, with a range of further cushions and leather interior linings available on request. An electrically opening panoramic sliding/tilting sunroof with an opaque roller blind is standard equipment, as are climatized massage seats. Obtainable on special request, the fixed centre console transforms the car into a spacious four-seater whose rear is just as suitable for working as for relaxing. This console is available with extending, folding tables, even a refrigerator with space for champagne bottles. Suitable silver champagne flutes for this are available from the accessories range.

A dedicated fragrance was developed for the Mercedes-Maybach GLS for active fragrancing as part of the optional AIR-BALANCE package: the white osmanthus blossom, floral and light, is rounded off by a gentle leather note and spicy tea.

From the power transfer and suspension to the headlamp technology, the technical systems of the Mercedes-Maybach GLS at least correspond to the most comfortable equipment level of the technically related Mercedes-Benz SUVs. Starting from this basis, added value that is typically Maybach is often a further result. For example, noise insulation in the interior has been raised to an even higher level by installing a rigid partition and a fixed parcel shelf behind the rear seats, separating the interior from the luggage compartment. A separate air conditioner for the rear seats is standard, and features additional outlets and heater boosters with which

temperature control is even faster and draught-free. There is a dedicated Maybach drive program for the suspension and powertrain; its settings offer rear seat passengers in particular the ultimate in ride comfort.

With the standard MBUX Rear Tablet in the centre console or the armrest between the rear seats, the extensive comfort and entertainment functions can also be intuitively controlled from the rear seats. The integration of digital devices used by passengers comprises all of the common standards.

Selected technical data

| | | |
|---|----------|-----------------------------|
| | | GLS 600 4MATIC ¹ |
| Number of cylinders/arrangement | | 8/V |
| Displacement | cc | 3982 |
| Rated output | kW/hp | 410/558 |
| at | rpm | 6000-6500 |
| Add. output with EQ Boost | kW/hp | 16/22 |
| Rated torque | Nm | 730 |
| at | rpm | 2500-5000 |
| Add. torque with EQ Boost | Nm | 250 |
| Combined fuel consumption ¹ | l/100 km | 12.0-11.7 |
| Combined CO ₂ emissions ¹ | g/km | 273-266 |
| Acceleration 0-100 km/h | s | 4.9 |
| Top speed | km/h | 250 |
| Length/width/height | mm | 5205/2030/1838 |
| Wheelbase | mm | 3135 |
| Track, front/rear | mm | 1699/1723 |
| Turning circle | m | 12.5 |

¹ Figures for fuel consumption and CO₂ emissions are provisional and were determined by the technical service for the certification process in accordance with the WLTP test method and correlated into NEDC figures. EC type approval and certificate of conformity with official figures are not yet available. Differences between the stated figures and the official figures are possible.

Successful sub-brand: Mercedes-Maybach

The Mercedes-Maybach brand stands for exclusive luxury, maximum comfort and state-of-the-art technology in automotive engineering, services and accessories. It is seen as a trailblazer in defining style and status. The maxim of its name-giver Wilhelm Maybach was to create the very best from the very best. In 2014 Mercedes-Maybach was established as a sub-brand of Mercedes-Benz as part of a brand realignment. Since its market launch in 2015, more than 45,000 examples of the Mercedes-Maybach S-Class have been delivered worldwide. In 2018 more Mercedes-Maybach S-Class cars were sold than ever before: one in seven S-Class models sold was a Maybach.

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Press Information and Digital Services for journalists and multipliers can be found

on our Mercedes me media online platform at <https://media.mercedes-benz.com/>

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Learn more about current topics and events related to Mercedes-Benz Cars & Vans

on our @MB_Press Twitter channel at www.twitter.com/MB_Press.

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Mercedes-Benz AG is responsible for the global business of Mercedes-Benz Cars and Mercedes-Benz Vans with 175,000 employees worldwide. Ola Källenius is Chairman of the Board of Management of Mercedes-Benz AG. The company focuses on the development, production and sales of passenger cars, vans and services. Furthermore, the company aspires to be leading in the fields of connectivity, autonomous driving and alternative drives with its forward-looking innovations. The product portfolio comprises the Mercedes-Benz brand with the sub-brands Mercedes-AMG, Mercedes-Maybach and Mercedes me - as well as the smart brand, and the EQ product and technology brand for electric mobility. Mercedes-Benz AG is one of the largest manufacturers of premium passenger cars. In 2018 it sold more than 2.3 million cars and over 420,000 vans. In its two business divisions, Mercedes-Benz AG is continually expanding its worldwide production network with over 40 production sites on four continents, while aligning itself to meet the requirements of electric mobility. At the same time, the company is developing its global battery production network on three continents. Sustainable actions play a decisive role in both business divisions. To the company, sustainability means creating value for all stakeholders on a lasting basis: customers, employees, investors, business partners and society as a whole. The basis for this is the sustainable business strategy of Daimler. In it, the company takes responsibility for the economic, ecological and social effects of its business activities and looks at the entire value chain.

Long version
The new Mercedes-Maybach GLS

Interview: Martin Hülder, Head of Product Management Mercedes-Maybach

"Unique combination of comfort, technology and luxury"

Martin Hülder has been Director of Product Management Mercedes-Maybach since November 2014. With a degree in automotive engineering, he has occupied senior sales and marketing positions at Daimler AG since 2007. He explains the role of the Mercedes-Maybach GLS 600 4MATIC for the brand's further development.

Mr Hülder, in a nutshell: What does Mercedes-Maybach stand for?

Hülder: Mercedes-Maybach stands for the ultimate in comfort, top technology and therefore sheer luxury.

With the Mercedes-Maybach GLS 600 4MATIC, the brand is being extended with the addition of a model in the SUV segment. Why?

The SUV vehicle concept has a major advantage for the luxury segment: the high seating position. In combination with the running boards, this makes access and egress outstandingly easy and convenient. Furthermore, the raised position in an SUV gives the occupants a different perspective of the surroundings, and many Mercedes-Maybach customers greatly appreciate this. Incidentally, a raised seating position is nothing new in the luxury segment: the grand luxury saloons of the 1930s, such as the Maybach Zeppelin, had a similar seating height for the driver and passengers, and very similar proportions.

Are you also aiming the GLS at new customers who are less interested in classical saloon models?

Of course. We are also aiming at customers who already drive an SUV. The different entry and the different seating position are experiences they want to retain. The worldwide success of SUVs has changed the standards and habits of car buyers.

Will the success of the luxury SUV come at the expense of the classical saloon models?

We are convinced that there will tend to be a distinction in demand rather than a substitution. The differences in design and vehicle concept are simply too great

for that. We therefore see the SUV as a supplementary offer. Our customers normally own several different vehicles – and if they drive an SUV, we want them to drive a Mercedes-Maybach that offers them the luxury they expect from the brand. By the way: Since its market launch in 2015, more than 45,000 examples of the Mercedes-Maybach S-Class have been delivered worldwide. In 2018 more Mercedes-Maybach S-Class cars were sold than ever before: one in seven S-Class models sold was a Maybach.

What distinguishes the Mercedes-Maybach GLS from other luxury SUVs?

The unique combination of comfort, technology and luxury. The great spaciousness, especially in the second seat row, and the use of materials are just two examples. Attention to detail also makes a difference. Think of the electrically extending running board, which not have ergonomic advantages when entering and leaving the vehicle. Their design is classically Mercedes-Maybach: fully integrated into the side sill panels, they are not visible in the retracted position. There is also the very high standard of design, which for example includes louvres in a pinstripe design and illuminated surfaces – which makes getting in a real experience.

What role does the Mercedes-Maybach GLS play within the portfolio?

Following various limited-edition small series by Mercedes-Maybach, for example the S-Class Cabriolet or the G-Class Landaulet, the GLS will supplement the Mercedes-Maybach portfolio alongside the S-Class. We are therefore able to offer customers with different preferences a wider choice.

How do you handle the Mercedes-Maybach customer experience after the purchase?

Our customers also enjoy a very personal, foresighted service after their purchase. In the markets cared for by the Mercedes-Benz Customer Assistance Centre in Maastricht, there is now a special customer care service, specially trained personnel and a dedicated hotline number only for Mercedes-Maybach. This is how we want to further improve the service experience for our customers. It further enhances a major advantage of Mercedes-Maybach from the customer's point of view: access to the very dense and highly skilled network of Mercedes-Benz service partners around the world.

Are there also high-quality accessories suitable for the vehicle?

Yes, the brand experience goes well beyond the vehicle itself and the available services. The brand rounds off the lifestyle of its customers with various

accessories. The licensing partner "Maybach – Icons of Luxury" produces exclusive collections accompanying the brand, and individual accessories that perfectly complement the individual models, for example travel bags, sunglasses, leatherware and home accessories. As well as first-class quality and design, the greatest importance is attached to the functionality of the products and accessories. Fine logo emblems and embossing lend a stylish touch to the products.

However, the all-round brand experience goes even further. The exclusive international customer programme "Circle of Excellence" offers unique events such as joint tours or test drives with new vehicles, opportunities for personal conversation with Mercedes-Maybach experts and brand ambassadors, and exclusive insights into our production locations.

The new Mercedes-Maybach GLS

Exterior design

Luxury in its purest form

The Mercedes-Maybach GLS combines the body form and superior, robust technical basis provided by the GLS, the S-Class among SUVs, with all the technical and material luxury of a top-class saloon car.

It stylishly yet emphatically shows its special standing among the Mercedes-Benz SUVs. The

Mercedes-Maybach bears the Mercedes star in the traditional way, upright on the bonnet. Where the Mercedes-Benz GLS sports a large star between two horizontal louvres in the radiator grille, the Mercedes-Maybach grille has a fine, elegant line of vertical chrome pinstripes as a motif. They widen into small oar-blades at the upper edge, blending into the chrome frame bearing the lettering MAYBACH at its top centre.

"The Mercedes-Maybach brand represents 'Ultimate Luxury' in its most contemporary, purest form", says Gorden Wagener, Chief Design Officer at Daimler AG. "The brand's style is embodied in sublime beauty, supreme aesthetics and elegance. In order to define the luxury of the future, we are taking the concept of Sensual Purity to the next level and transforming ourselves from a premium manufacturer to the world's leading design brand."

The headlamps with MULTIBEAM LED technology as standard present the entire front lighting as if in jewellery showcases. Below the radiator grille, the front apron has a wide air inlet that discreetly suggests the power of the V8 engine with a finely woven grille in high-grade chrome. On the left and right of the radiator grille, this grille has finely curved trim strips for additional embellishment, and it tapers to form an elegant, slim cross-piece emphasising the horizontal line between the radiator grille and the registration plate bracket. Below the chrome grille the bumper has a high-gloss black paint finish and a robust, high-gloss chrome underguard indicating the vehicle's considerably refined SUV character.

The side view of the car likewise shows a refined reinterpretation of the SUV genes. The robust chrome surrounds of the side windows are subdivided by the chrome-plated B-pillar facings. This embellishing feature is a fixed part of the Mercedes-Maybach bumper signature, and externally emphasises the length of the rear seating area. The black-painted side sill panels with chrome inserts and the strut-mounted roof rails, all typical SUV features, have also been made into embellishing features with their high-gloss finish and striking chrome highlights.

On the D-pillar, an elegant Mercedes-Maybach badge underlines the high quality and great attention to detail. In the dark, a Mercedes-Maybach emblem projected onto the ground from the exterior mirrors is part of the welcome light show when opening the vehicle.

Illuminated ramp: the extending running boards ensure a dynamic entry experience

The side sill panels in particular are more than just an embellishment. As standard they include a running board that automatically swings out for passengers to enter and leave the vehicle. Made from high-gloss aluminium with anti-slip rubber strips, the more than two-metre long running boards are a USP of the Mercedes-Maybach GLS. They not only allow Mercedes-Maybach GLS drivers and passengers convenient access and egress, but also ensure an incomparable spectacle each time (see next chapter for details).

The large wheels have a diameter of 825 millimetres, while the rims measure 22 or 23 inches in diameter. Their multi-spoke design was conceived exclusively for the Mercedes-Maybach. The design of the 23-inch wheels echoes the pinstripe motif of the radiator grille. The slim, filigree spokes blend into the rim flange as small oar-blades, like the louvres of the radiator grille. The standard 22-inch wheels are made of die-cast aluminium painted in high-gloss black with a high-sheen finish, while the 23-inch wheels are made of forged, polished aluminium. The elegant hub covers are made of high-quality metal, and bear a Mercedes star surrounded by "Maybach" lettering on each side. The large, flush-mounted wheels completely fill the wheel arches. The SUV-specific wheel arch flares are painted in the vehicle colour.

Striking and elegant embellishments as design features are continued at the rear of the Mercedes-Maybach GLS. Below the rear window, to the left and right of the Mercedes star, the car shows its model designation in a Mercedes-Maybach specific script. Below this a chrome facing extends across the entire width of the car, from the outer edge of the first rear light to its counterpart on the other side. A second trim strip is fitted at the height of the loading sill, and the rear reflectors are embedded in the broad ends of the reflectors like gemstones. The lower edge of the rear apron is painted in high-gloss black, and carries a robust, high-gloss chrome underguard that encloses the two large, rectangular tailpipe trim elements. Between them a characteristic, horizontal connecting piece provides a further, typical Mercedes-Maybach design feature.

Two-tone paint finishes are optionally available, and these underline the balanced proportions of the body. A total of eight combinations are planned, the colour named first being that of the lower section: cavansite blue/iridium silver; designo

diamond white bright/obsidian black; iridium silver/designo diamond white bright; iridium silver/selenite grey; obsidian black/kalahari gold; obsidian black/patagonia red; obsidian black/rubellite red; emerald green/mojave silver. These paint finishes are rendered particularly elegant by the fluid course of the separating lines, where a fine pinstripe in the one colour merges into the body of the other colour along the vehicle's beltline. This fine line once again echoes the pinstripe motif.

The new Mercedes-Maybach GLS

Under the microscope: the electric running boards

Spectacular impact assured

One highlight of the Mercedes-Maybach GLS are the electrically extending running boards. They make accessing and leaving the high seating position both convenient and safe, and ensure an elegant spectacle.

The running boards painted in high-gloss black are each 2.06 metres long, and have a maximum width of 21 centimetres in the rear door areas – they are slightly narrower below the front doors. They occupy the entire length of the side sill panels. Black rubber strips are inset into their surfaces of anodised aluminium, with their contours echoing the oar-blade pattern from the radiator grille at the rear end. At the rear end of each running board there is also a chrome-look Mercedes-Maybach emblem.

When in the retracted position, the running board is almost invisibly concealed within the side sill panel. In this position it is inclined towards the centre of the vehicle by around 45°, and closely follows the side sill. This means that ground clearance is not compromised. When a side door is opened, the running board on the side concerned is first moved downwards silently and smoothly by two electrically powered arms of die-cast aluminium each with four articulation joints, and then moves outwards to a horizontal position. The time taken between operating the door handle and deployment of the running board is only roughly one second. In the dark, as an addition to the ambient illumination provided by the open doors, the running board surface in the rear door area is illuminated by an LED strip in the side sill panel, including projection of the Maybach emblem.

When the car is lowered by 25 mm by AIRMATIC when the door is opened, the distance between the road surface and the vehicle's underfloor is further reduced by the running board, making access and egress even easier. The anti-slip rubber strips ensure a secure foothold. The support structure of each running board is designed for a maximum load of 200 kg.

If a rear door is opened, the running board on the side concerned automatically swings outwards. This default setting can be changed at any time, using a special menu in the media display. For example, it is also possible to keep the running boards permanently retracted or only activated on manual instruction. In manual mode, the running boards can also be deployed when the doors are closed. If the vehicle is moving at more than 15 km/h, the running boards are automatically retracted. In the Off-Road drive program, the automatic function is always

deactivated to avoid collisions with uneven surfaces. After the side door is closed, the running board retracts in around 1.5 seconds.

The kinematics and installed position of the running board ensure that on level surfaces, deployment and retraction of the running board is possible without constraint even in the low-level position of the AIRMATIC. For safety reasons the automatic function has sensors similar to those used in the anti-pinch protection systems of power windows or sliding sunroofs. The procedure is therefore automatically stopped if a collision occurs with an obstacle.

The new Mercedes-Maybach GLS

Interior design

Sure-footed styling and authentic luxury

The interior of the Mercedes-Maybach uses the generous dimensions of the GLS to offer drivers and passengers comfortable seating on all four or five seats. It is conceived as a feel-good zone where the driver and passengers are able to use their time as they wish in extraordinary comfort. Especially the Executive Rear can be used both as an office and as a private relaxation zone. The integration of digital devices plays an important role in every seat. High-resolution displays with brilliant graphics and touchscreens for controlling the extensive features further enhance the luxurious ambience. The Mercedes-Maybach user can perfectly integrate his or her digital environment into the car, whether as a self-driver or being chauffeured.

The character of the interior is particularly reflected in the high-grade materials, which are fitted and finished with great care and a high level of craftsmanship. The generosity and luxury of the Mercedes-Maybach are reflected for example in the nappa leather lined dashboard and the horizontal, chrome-look louvres of the air vents. The latter make a discreet reference to typical Mercedes-Maybach details from the exterior design, e.g. the pinstripe decor of the radiator grille or the horizontal connecting piece of the tailpipe trim elements. Alongside other options, two decors are available for the wood trim elements that echo the pinstripe motif (see Under the Microscope).

The central element in the dashboard's design is an impressively sized screen unit embedded in an energetic, distinctively styled and fully leather-lined instrument panel. The instrument panel flows into the door panels, and the integral trim element likewise extends into the doors. At the same time, it creates the impression that the upper cockpit section is floating. The instrument cluster and media display (2 x 12.3-inch as standard) are housed behind a shared continuous glass surface to form a large free-standing screen.

When the ignition is switched on, the passengers are welcomed on all screens by an animation with Maybach lettering and an exclusive colour combination. There is then a choice of different display styles such as Sport, Progressive or Discreet, which contain different numbers of displays and adjust the ambience to suit the current mood. An emotive presentation with brilliant graphics underlines the comprehensibility of the intuitive control structure. One unique feature of MBUX (Mercedes-Benz User Experience) is its learning capability thanks to artificial intelligence. A further display style has been designed exclusively for the

Mercedes-Maybach – Maybach Classic. In this case the overall mood is darkened to deep blue. Figures, needles and bezels are presented in rosé gold. The virtual glazing of the tubes is discreetly engraved.

The instrument cluster is divided into three separately selectable display zones – the two dial instruments and the central display field positioned between them. All three zones can be intuitively configured using the left touch control button in the steering wheel, allowing a very high degree of individualisation. The driver can individually combine three functions and displays that are important for his or her route and driving style.

The multifunction steering wheel of the Mercedes-Maybach GLS with its rim in nappa leather or optionally wood is pleasant to the touch, matches the upholstery and trim and is heatable on request. The boss with the driver airbag is leather-covered to match. The left and right spokes have control arrays with touch buttons, and Maybach lettering on the clasp. There is a touchpad in the centre console as a further means of controlling many vehicle functions. The prominent, raised centre console creates a robust contrast with the flee-floating appearance of the dashboard. The console carries two robust, leather-covered grab handles as a gentle reminder of the car's SUV character. It also features an elegant handrest with the exclusive Maybach emblem.

Ambience from the yachting world and rosé gold as a symbolic Mercedes-Maybach colour

The high-gloss or open-pore wood surfaces of the trim elements, plus the upholstery in nappa magma grey/black or nappa mahogany brown/macchiato beige as standard ensure a very high perceived value. The same colour combinations are also available for the optional designo Leather package. For this a lighter upholstery colour in crystal white/silver grey pearl will become available as an alternative soon after market launch, awakening associations with interior design in luxury yacht-building and thereby underlining the high quality of the selected materials. One typical Mercedes-Maybach detail is the colour rosé gold for the piping on the white leather.

Another feature exhibiting a high level of craftsmanship are the multiple box pleats along the centreline of the seat upholstery. The leather is indented at the centre, and the two halves on the sides are folded in to face each other and form two padded pockets opposing each other across the indentation. The two pockets are sewn together at the top and bottom. The result is a smooth, stretched seat surface that can adapt itself to the contours of the back and is taut where the seat is supposed to give way less. The box pleat motif is repeated in the cushions accompanying the Leather package, where it is cleverly emphasised: the box

pleat on the cushion covers allows a view of a sewn-in contrasting strip in the rosé gold colour tone of the piping.

Wood trim elements with Mercedes-Maybach emblem matching the remaining decor are attached to the backrests of the front seats as standard, additionally enhancing the ambience in the rear. On request the screens for the MBUX Rear Seat Entertainment system can also be installed on the front seat backrests. Via the Maybach accessories range, suitable pre-installation kits for the installation or carriage of mobile computers of different formats are also available.

The in-door speakers of the Burmester® surround sound system are inset into the wood trim behind metal meshes. High-quality chromework and Mercedes-Maybach badges in the interior create further highlights. A stimulating contrast is created by the traditional materials, their craftsman-like finish and the modern high-tech appointments of the Mercedes-Maybach.

Luxury also means using the latest styling methods

The LED optical fibres of the standard ambient lighting with 64 colours are inset into the door panels beneath the trim elements. They rise to the parcel shelf from the rear doors as "flowing lines", and elegantly envelop the seats. In the middle of the rear seat unit they then continue to the sides of the comfort centre armrest of the five-seater, or the rear centre console of the four-seater variant. They also surround the MBUX Rear Tablet, which allows the comfort features for the rear to be operated from there. Exclusively, and for the first time in the Mercedes-Maybach GLS, the ambient lighting also includes optical fibres in the roof liner, on the left and right sides of the panoramic sliding/tilting roof, which especially emphasises the effect of the roof aperture at night.

The large panoramic sliding/tilting roof allows a great deal of light into the interior, as well as fresh air when required. Its electrically operated roller blind is completely opaque and allows privacy for the rear passengers, just like the electrically operated blinds on the rear side windows. Passengers will also find temperature-controlled cup holders in the extended centre console.

In the four-seater variant, the continuous centre console has a lockable closure whose wood decor echoes the waterfall decor of the boot division. Behind it is a stowage compartment, or if preferred a large, refrigerated compartment. This can accommodate three 0.75-litre champagne bottles, for example. Below the lockable closure there is an optionally heatable armrest in nappa leather. In front of it is the MBUX Rear Tablet with a 7-inch screen diagonal for the control of all comfort features. The MBUX Rear Tablet can be removed from its charger/holder for convenience of use. The holder

is located in the folding lid of the illuminated stowage compartment, which can also be optionally equipped with a 115/230 V socket or folding tables. In front of it there is space for an optional Wireless Mobile Interface, which can be optionally equipped with a Bluetooth® receiver for discreet conversations.

Between the rear seat footwells, the continuous centre console has a wood trim element with a sliding cover which reveals temperature-controlled cup holders and a stowage compartment. Optionally this space can also be used to accommodate the silver champagne flutes available as Mercedes-Maybach Genuine Accessories, where a fixed space is provided in the lid of the refrigerator compartment.

The new Mercedes-Maybach GLS

Under the microscope: designo decor with "flowing lines" and "light lines"

High-tech meets craftsmanship

The pinstripe motif is a striking Mercedes-Maybach feature that can be found in numerous places, such as the radiator grille, running boards, wheel design or the air conditioning vents. This pattern has also inspired two trim designs. As a traditional material, wood is processed and finished to the usual standard of craftsmanship for these parts. However, presenting the guiding pinstripe theme is only possible using high-tech processes.

In the optional equipment "designo high-gloss black flowing lines piano lacquer", extremely fine, light "flowing lines" reminiscent of marquetry pass across the trim element, taking on its form and emphasising its contours. They describe an elegant flourish and draw apart or come together to heighten the harmonious overall effect. These lines are created by skilled craftsmanship and precise digital technology.

The carefully selected wood veneer has been aged for at least ten years, and a great deal of craftsmanship goes into cutting, reinforcing and stabilising it before it is sanded particularly thinly to take shape. It is then mounted on a carrier which gives it shape, and dyed black. The actual application of the "flowing lines" now follows. A specially developed CNC¹ milling cutter is used to define the fine lines in the layer of veneer, only a few tenths of a millimetre wide. These extremely precisely milled striations are also only just under one millimetre in depth. In the process the veneer layer is completely cut through, exposing the light carrier material. The difficulty of this operation is that the veneer can tear. To prevent this, the direction of milling must for example be adapted to the course of the wood fibres.

After milling, all of the milling dust must be removed from the components, right down into the fine striations. Microscopic checks are performed to ensure that the lines are cleanly milled and that all residue has been removed. The tiniest of dirt particles would make the part unusable. Only if it gets this far unblemished does it receive a full coating by machine.

The fine line pattern for the optional "designo high-gloss brown light lines lime wood" is produced in an altogether different way. In the first stage of the process,

¹ CNC = Computerized Numerical Control. With the help of their sophisticated control technology, these machine tools can even produce workpieces with complex forms highly precisely in an automatic process.

several layers of wood veneer are glued together to form a block. Every seventh layer is made of polycarbonate rather than wood. 0.6 mm fine slices are cut from the resulting layer-glued block perpendicular to the surface of the veneers and then sanded smooth. They form the veneer of the trim elements and are stained in a dark shade. The stain is then wiped away again so that the polycarbonate strips stand out as "light lines". In contrast to the "flowing lines" of the piano lacquer and magnolia trim, these lines run dead straight and parallel. When cutting and applying the veneers onto the moulded parts, meticulous attention must therefore be paid to their alignment. These veneers are then fully coated with clearcoat.

The finish, involving sanding and polishing, is then the same for both trim variants. Most of the work is done by hand, accompanied by frequent, careful checks. It takes a great deal of experience, finesse and a good eye to achieve an elegant surface. The walnut veneer receives a deep shine to which the "light lines" lend a unique structure. In the finely chiselled line pattern of the "flowing lines", it seems as though the light lines are inserted into the dark, high-gloss black surface of the piano lacquer or the magnolia veneer.

The new Mercedes-Maybach GLS

Dimensional concept

Space for the good life

The spatial concept of the Mercedes-Maybach GLS starts with the seated position high above the road surface, which puts the SUV concept into the luxury segment. Compared with the S-Class, the driver sits more than 25 cm higher, the rear passengers almost 28 cm higher. This makes it particularly easy for occupants to get in through the wide door openings using the electric running boards. The interior of the Mercedes-Maybach uses the generous dimensions of the GLS to offer drivers and passengers comfortable and spacious seating. The interior is designed as a feel-good zone. The rear compartment especially, with seats 120 mm further back than they are in the Mercedes-Benz GLS, serves as both an office and a private relaxation zone. The outer rear seats with their calf supports and the exceptionally wide backrest that can be inclined backwards up to 43.5° are ideal for deep relaxation on long journeys or even a rejuvenating power nap.

The long wheelbase length of 3135 mm is used to the full to provide generous spaciousness in the interior. This results in the vast legroom of 1103 mm, in which the calf supports for both outer rear seats can be extended. They are standard for both seating configurations – the five-seater or the optional four-seater. If the front passenger seat is moved into the chauffeur position, there is up to 1.34 m of legroom behind it.

Moving the front passenger seat into the chauffeur position not only extends the legroom behind, it also inclines the backrest towards the seat cushion, taking account of the statutory requirements for the driver's field of vision, which may vary from market to market. Combined with the slightly higher sitting position in the rear seats compared with the front seats, this results in an exceptionally generous feeling of spaciousness with good forward visibility.

The rear seats are optimised to provide an outstanding level of seating comfort, particularly in the two outer seats. Compared with the position of the second seat row in the Mercedes-Benz GLS, the seats are each moved 30 mm inward and 120 mm rearward. This means there is 16 mm more elbow room between the seat occupant and the door panelling in the Mercedes-Maybach. The headroom in the rear seats is 1020 mm when they are in the normal position with the backrests inclined 27° rearward.

Behind the rear seats, the fixed load compartment partition with exquisitely designed parcel shelf separates the interior from the luggage compartment. This solution offers advantages in terms of body rigidity, low noise levels and high climate comfort. The luggage compartment capacity is 525 litres. The loading space between the wheel arches is 1058 mm wide - enough room for four large golf bags. The through-loading height of the luggage compartment below the parcel shelf is 398 mm, making it 22 mm higher than in an S-Class.

The front seats provide the driver and front passenger with the same generous amount of space that is available in the Mercedes-Benz GLS. Even exceptionally tall people can find a relaxed and comfortable seated position thanks to the wide adjustment ranges of the seats. There is 1025 mm of headroom up to the standard-fit panoramic tilting/sliding sunroof.

The new Mercedes-Maybach GLS

Seating comfort

Luxury you never stop feeling

Seating comfort in all seats has always been a stand-out feature of all Mercedes-Maybach vehicles. In the new Mercedes-Maybach GLS, all seats are electrically adjustable, heated, climatized and equipped with massage functions as standard.

Multicontour seats, which can adapt to drivers and front passengers of any stature, are fitted as standard in the front. The seat cushion length, i.e. the part of the seat that supports the thighs, is electrically adjustable, as are the position and angle of the seat cushion and backrest. The backrests feature four-way adjustable lumbar support. Even the head restraints and the steering column are electrically adjustable. A memory function allows the settings to be stored together with those for the electric exterior mirrors.

But even the ideal seat position can be too one-sided in the long run, which is why the ENERGIZING seat kinetics function is included as standard for the driver and front passenger. The system supports advantageous changes in the seating posture by means of minute movements of the seat cushion and backrest when on a journey. This encourages the driver and front passenger to "sit actively". Their seats also feature inflatable active cushions in the seat backrest bolsters for additional lateral support when cornering. In conjunction with the Driving Assistance package Plus, this feature is also used by PRE-SAFE® Impulse Side.

There is also a massage system included as standard for the rear Executive seats and the two front seats: ten pressure points in each backrest, which can be combined with heating elements for a 'hot-stone massage', can give the seat occupant's back an effective massage. Each of the front seat cushions also includes four additional pressure points for massaging the seat occupants.

Climatized seats for enhanced well-being

The front and rear seats in the Mercedes-Maybach are climatized, including ventilation and heating of the seat cushions and backrests. Once activated, the ventilation operates in 'reverse' mode initially – in other words, air is drawn away from the passenger's body for around one minute at first. Cooled air is then directed at the passenger's body during continuous operation. In this way, the unpleasant effect of excessive heat transfer away from the body can be avoided. In cold temperatures, the fast-acting seat heating provides thermal comfort with almost no delay. If the GLS is equipped with the optional auxiliary heater, seat

heating and seat ventilation can also be activated before getting into the vehicle using the Mercedes me App on a smartphone or an optional additional key.

The Executive area in the rear is available in a choice of two different designs - with two or three seats. In both versions, the two outer seats are Executive seats with calf supports and backrests that recline a long way back. The multicontour upholstery offers good lateral support through the backrest and thus high comfort on long journeys and when driving on rough terrain.

The height and angle of the comfort head restraints on the Executive seats are electrically adjustable.

These head restraints feature additional cushions, which have already become a popular feature among Mercedes-Maybach S-Class customers. They are exceptionally comfortable, keep vibrations away from the passenger's leaned head and also meet the latest Euro NCAP requirements. Customers ordering the optional designo Leather package get leather cushions for the thigh supports on the Executive seats and additional accompanying cushions with matching leather trim. These individually positionable cushions can make the sitting position even more comfortable.

The comprehensive adjustment options for the rear seats make it sensible to have a memory function here, too, allowing several favourite settings to be stored and recalled. Another practical feature is the 'tidy up' button: a single push of the button is all it takes to return the rear seats and, if it has been moved into the chauffeur position, the front passenger seat to their original positions.

The familiar and often copied Mercedes-Benz control panels are fitted in the front and rear doors to operate the many convenience features and adjustment options. It is even possible to activate the central locking from the rear doors. All of the rear seats' comfort functions can be controlled using the MBUX Command Centre Rear as an alternative to using the control panels in the doors.

There are also command menus that can be called up in the MBUX, MBUX Rear Tablet and MBUX Rear Seat Entertainment System. The MBUX Rear Tablet is housed in the extended centre console in the four-seater variant, while it is located in the fold-out luxury centre armrest with chrome trim element in the five-seater version. It also has space for an illuminated stowage compartment with two USB ports. Optionally a wireless charging module for smartphones can be installed here.

The removable tablet further enhances ease of operation when the rear passenger has adopted a particularly comfortable, reclined position with the separate cushions. If the occupant then also wants to use the seat's climatisation

or massage function, listen to music or adjust the ambient lighting, they do not need to sit up again to select the setting.

Relax in comfort even more with ENERGIZING comfort programmes

The climatized seats and the massage functions are integrated into the ENERGIZING package's comfort control. ENERGIZING comfort control networks various comfort systems in the vehicle and uses lighting and musical moods plus a number of massages for a wide range of feel-good programmes. The ENERGIZING COACH, which recommends these programmes based on the situation, can offer programmes such as Freshness and Vitality or, in conjunction with the Warmth Comfort package, also Warmth, Joy and Comfort programmes. If a compatible wearable or a smartwatch is worn, personal values such as stress level or quality of sleep optimise the accuracy of the recommendation.

The programmes all run for ten minutes. They are visualised on the media display with colour graphics, and backed by suitable music. Individual functions of the programs can be deactivated. ENERGIZING comfort control also incorporates ambient lighting, which is harmoniously tailored to each of the individual screen designs. The light stages the interior like a work of art by composing colour worlds from different colours.

The new Mercedes-Maybach GLS

Comfort appointments

Pampering in total peace and quiet

In addition to sumptuous spaciousness and exquisitely comfortable seats, the interior of the

Mercedes-Maybach GLS offers the high standard of comfort appointments one would expect in the luxury class. The effective insulation of the interior to prevent disturbing noise and vibration means that these systems have an additional requirement to fulfil: they need to perform their tasks extremely quietly. This makes it easier for the driver and Executive passengers to converse, as does the intercom (two-way in-car communication) included as part of the standard-fit Burmester® surround sound system.

The standard-fit THERMOTRONIC is likewise designed so as not to disturb the peace in the Mercedes-Maybach GLS. Accordingly the fan motor rests on rubber bearings so that no vibrations are transferred to the housing that might lead to a noise in the interior. A coating on the air ducts additionally dampens airflow noises. The air is then conducted to the vents after thorough filtering and temperature control according to the weather and the occupants' wishes.

The standard-fit Executive Climate System (ECS) has a separate air conditioner for the rear and controls the temperature and the air quantity on the left and right and in both seat rows separately. Numerous vents ensure effective and draught-free air supply to exactly where it is needed. Those in the footwell at the front and rear operate independently from those in the B-pillars, for example. Above the rear doors there are additional, fixed outlet openings which are used by the rear air conditioner and make the ventilation particularly pleasant and indirect. Two additional electric heating elements in the rear footwell provide a pleasant temperature in double-quick time, even when it's cold outside.

Discreet and comfortable: the air conditioning system thinks for itself

The ECS system is configured so that the passenger adjusts the system for their seat once, and the automatic system then ensures the desired, pleasant interior climate every time. This is why several sensors measure the inside and outside temperatures, the angle of the sun and even the air humidity at the windscreen, so as to prevent misted-up windows before they can cause an issue.

The control unit also detects poor air quality outside the vehicle, or receives a warning from the navigation system if the vehicle is approaching a tunnel. In

both cases, the system automatically switches to air recirculation mode, and the side windows and sliding sunroof are closed. Like a good butler, the control system also remembers the personal preferences of up to seven different, regular users and one guest.

A separate control panel in the rear and the menus in the MBUX Rear Tablet or MBUX Rear Seat Entertainment System allow control of the Executive Climate System from the rear seats, too. Mercedes me connect can be used in conjunction with the optional auxiliary heater to pre-heat or pre-cool the vehicle by remote control before setting off.

The optional auxiliary heater, Warmth Comfort package, heated multifunction steering wheel and AIR-BALANCE allow individual adjustment of the ECS system. The Warmth Comfort package includes heatable areas in the armrests and door centre panels on all four doors and the armrest in the fixed centre console.

Even better air quality and enhanced wellness thanks to the AIR-BALANCE package.

Even more wellness is assured by the AIR-BALANCE package. This has two particularly clever features. One is active fragrancing of the interior: activated, deactivated and variably controlled via a separate menu in the infotainment system, a fragrance generator perfumes the air entering the interior with a pleasant fragrance from a glass flask. The new Mercedes-Maybach GLS has its own signature fragrance: the white osmanthus blossom, floral and light, is rounded off by a gentle leather note and spicy tea.

Fragrance in the interior contributes greatly to the luxurious ambience but is also a matter of individual taste. Familiar AIR-BALANCE fragrances from the Mercedes-Benz range are therefore also available as alternatives to the exclusive Maybach fragrance. The fragrancing system's technology ensures that the fragrance also actually evaporates after system deactivation and air exchange. No perfume droplets stick to clothing or the occupants.

Another function of the AIR-BALANCE Package is air ionisation by a high-voltage ioniser in the air duct. The ioniser generates negative ions which are attracted by the mainly positively charged airborne particles. Owing to the magnetic attraction, they form heavier agglomerations and fall to the floor. In this way, certain viruses, bacteria and spores whose deactivation measurably benefits asthmatics and allergy sufferers are precipitated from the breathable air. Ionisation freshens the air and keeps the occupants feeling fit for longer.

Use the time: equipment for work and entertainment

The Mercedes-Maybach GLS connectivity allows passengers to take their own digital environment with them into the car and integrate it perfectly there. At least four USB ports and WLAN/Bluetooth® enable the occupants to incorporate and power their devices. The MBUX infotainment system supports the popular formats and internet protocols, and can manage up to eight different user profiles. Folding tables and a 115/230 V socket can be ordered for the large compartment in the fixed rear centre console, turning the rear area into a comfortable mobile office.

THE MBUX Rear Seat Entertainment System is available for entertaining the rear passengers. It includes two 11.6-inch touchscreens on which films or music can be played or, at a later point, the integrated web browser can be used. Each screen displays the content selected by the individual user. Special Mercedes-Benz Bluetooth® headphones are optionally available for a high-quality sound. In addition to the options offered by the MBUX infotainment system, users can also play their own media from a mobile phone, tablet or laptop. The MBUX Rear Seat Entertainment System can also be controlled via the standard-fit MBUX Rear Tablet.

The low noise level inside the Mercedes-Maybach GLS creates the ideal conditions for the standard-fit Burmester® premium surround sound system. The Burmester® high-end 3D surround sound system is designed to meet the highest individual requirements. Some 27 high-performance speakers and 24 separate amplifier channels provide an overall output of 1590 watts. It offers superb sound quality precisely tuned to the interior. Both systems have an integrated two-way ICC (In-Car Communication) system to make it easier for occupants in the front and rear seats to converse.

The new Mercedes-Maybach GLS

Suspension

Only floating is better

A Mercedes-Maybach always aspires to offer the best suspension comfort in its class. The Mercedes-Maybach GLS suspension is therefore based on that of the Mercedes-Benz GLS. The Mercedes-Maybach features the AIRMATIC air suspension with Adaptive Damping System Plus (ADS+) as standard. The E-ACTIVE BODY CONTROL suspension based on the 48 V on-board electrical system, an innovation in suspension technology that meets the highest standards, can be ordered as an option. A special Maybach drive program tuned for maximum ride comfort has been developed for both suspension variants.

The front wheel suspension is a double wishbone suspension with the upper wishbone in a high position, which benefits spring travel when driving off-road. All transverse control arms and the steering knuckles are weight-optimised forged aluminium components. Their light weight and rigidity ensure low unsprung masses and create good conditions for uncoupling wheel suspension vibrations and oscillations from the vehicle body. The design of the front axle ensures separate introduction of longitudinal and lateral forces, which benefits both the vehicle dynamics and suspension comfort.

Even the links of the four-link rear suspension are largely made of aluminium and are optimised based on the same principles as the front axle parts in terms of weight, handling dynamics and vibration comfort. Wheel control is by a cast aluminium lower wishbone and a forged aluminium upper strut rod, as well as an upper camber strut of sheet steel.

Constant level

The standard-fit AIRMATIC air suspension responds particularly sensitively. It combines air suspension bellows with adaptive ADS+ dampers whose characteristics can be fully automatically varied at each individual wheel, in both the compression and rebound stages. While driving, a sophisticated sensor system and algorithms set the dampers according to the quality of the road to ensure that, for example, driving over a bump with just one wheel is not transmitted to the entire axle and the interior. At the front axle the springs and dampers are housed in one suspension strut, but they are separate at the rear axle.

The driver personally and the selected drive programs can change the suspension set-up. However, the AIRMATIC control unit also uses sophisticated sensors and algorithms to analyse the driving situation and make automatic adjustments. This includes the level control, which is part of AIRMATIC. It keeps the ground clearance constant irrespective of the vehicle load but also makes changes. By way of example, the vehicle body is lowered by 15 mm at high speeds to reduce the aerodynamic drag and increase driving stability. At speeds below 30 km/h, lowering of the car by 25 mm can be activated to make it easier for occupants to get in and out.

Superlative ride comfort with E-ACTIVE BODY CONTROL

Even better ride comfort and agility, plus completely new functions such as recovery mode, are provided by the newly developed E-ACTIVE BODY CONTROL suspension, which is combined with the AIRMATIC air suspension. This is the only system on the market that can individually control spring and damping forces at each wheel, suppressing rolling, pitching and lifting movements. Together with ROAD SURFACE SCAN and the curve inclination function CURVE, E-ACTIVE BODY CONTROL makes an exceptional level of comfort possible, and supports the claim of Mercedes-Benz to build the world's most intelligent SUV suspension.

E-ACTIVE BODY CONTROL operates with 48 volts. The system is based on the AIRMATIC all-air suspension system and offers the same all-round self-levelling. Furthermore, the electrically driven hydraulic pump generates dynamic forces that overlay the air suspension forces and actively support and dampen the vehicle body, e.g. during linear and lateral acceleration or when driving on uneven roads. The body no longer squats or pitches during braking and acceleration, and on poor road surfaces the system is even able to recuperate energy, roughly halving the energy requirement compared with the preceding system in the S-Class.

Additional features to enhance occupant comfort:

- In CURVE drive mode, the Mercedes-Maybach GLS actively leans into bends by up to 3° in three stages, like a motorcycle. This reduces the lateral forces acting on the occupants. Cornering is therefore made much more pleasant, especially for the front and rear passengers.
- The ROAD SURFACE SCAN function comprises a stereo multi-purpose camera that continually records the road surface ahead of the vehicle. The suspension struts are then activated so as to substantially reduce the body movements when driving over surface undulations, as the suspension responds even before the uneven stretch is reached. This enhances the comfort in particular away from paved roads.

- The recovery function is included as part of the Off-Road drive program and helps to free the vehicle more easily if it gets stuck in sand, for example. If possible the suspension level is automatically raised and lowered automatically several times, which alternately increases or reduces the ground pressure of the tyres and therefore improves traction. The car rocks itself free.

Exclusive to the Mercedes-Maybach: the Maybach DYNAMIC SELECT drive program

DYNAMIC SELECT offers a Maybach drive program developed specifically for the Maybach. It is fully focussed on ride comfort for the rear passengers, while the Comfort drive program offers balanced ride comfort for the front and rear passengers.

The Maybach program ensures that the body movements are at their lowest precisely at the Executive seats. There is therefore a vibration node here to minimise the amplitudes. Other program settings focus on the engine and transmission:

- Very flat accelerator curve for chauffeur mode
- Transmission tuning with fewer gearshifts for smooth driving
- Starting off in second gear
- No stop/start function.

The new Mercedes-Maybach GLS

Powertrain

Sublime power in velvet gloves

The new Mercedes-Maybach GLS 600 4MATIC (combined fuel consumption: 12.0-11.7 l/100 km; combined CO₂ emissions: 273-266 g/km)¹ is driven exclusively by the powerful and discreet M 177 –

a new, electrified variant of the V8 petrol engine with a displacement of 3982 cc, 48-volt on-board electrical system and integrated starter-alternator (ISG). ISG is responsible for hybrid functions such as EQ Boost or energy recovery, while allowing fuel savings that were previously reserved for high-voltage hybrid technology. The development focused on the long-term improvement of the consumption and emissions figures. At the same time, the customers' power expectations need to be met. As a result, the engine produces an output of 410 kW (558 hp) and 730 Nm of torque. An additional 250 Nm of torque and 16 kW/22 hp output are available temporarily via EQ Boost. Power is transmitted by the

9G-TRONIC automatic transmission. The wide spread of ratios for gears one to nine ensures a significant reduction in the engine speed and is a decisive factor behind the high levels of drive and ride comfort. Likewise standard is the transfer case with variable transfer of the drive torque from 0-100 percent (Torque on Demand) between the axles.

The new biturbo is configured for high drive comfort and, at the same time, high efficiency and effective emissions reduction. Stand-out features of the V8 in this engine family include the cylinder shut-off in the part-load range. The variable valve control system CAMTRONIC shuts off four cylinders at once. This reduces the gas exchange losses while improving the overall efficiency of the remaining four cylinders in combustion mode by shifting the operating point towards higher loads.

In the Mercedes-Maybach GLS 600 4MATIC, the cylinder shut-off is active in the DYNAMIC SELECT Comfort drive program in the 800 – 3250 rpm speed range. Above that engine speed or when the driver strongly presses the accelerator pedal, cylinders 2, 3, 5 and 8 are switched on within milliseconds. The transition between the two operating modes is seamless and with no loss of comfort for the

¹Figures for fuel consumption and CO₂ emissions are provisional and were determined by the Technical Service for the certification process in accordance with the WLTP test method and correlated into NEDC figures. EC type approval and a certificate of conformity with official figures are not yet available. Differences between the stated figures and the official figures are possible.

occupants. A pendulum-type absorber reduces both fourth-order vibrations in eight-cylinder mode as well as second-order vibrations in four-cylinder mode.

The two cylinder heads have particularly high thermal resistance and are thermally conductive thanks to a zirconium alloy. Their intake and exhaust ducts form the tumble, the movement of the air mass during cylinder charging, for particularly efficient and low-emission mixture formation and combustion. A third-generation spray-guided direct petrol injection system with piezo injectors also ensures multiple injections as needed with 100 to 200 bar. The two instantly responding twin-scroll turbochargers are positioned in the "hot inside V" between the cylinder banks to save space. Their boost pressure is adapted to the demand in real time by a control valve. These measures are intertwined and improve the thermal efficiency and the emissions level.

To keep the mechanical losses low, the cylinder surfaces feature NANOSLIDE® coating. Another measure implemented to reduce friction and therefore consumption is "spectacle honing", which prevents unwanted distortion during machining of the cylinder surfaces and thus reduces in-engine friction subsequently.

Saving without compromising: EQ Boost

EQ Boost through the ISG offers great potential for fuel saving and added comfort due to the load point transfer during which the combustion engine is used at a more efficient operating point due to precisely measured additional torque of the ISG. During deceleration, the kinetic energy from the starter-generator is converted into electric power ("recuperated") as appropriate to the driving situation and used to charge the battery.

Knowing where to send the power: 9G-TRONIC and Torque on Demand

Power is sent to the road via the 9G-TRONIC automatic transmission, which has been enhanced to handle the V8 engine's high torque. The particularly good gear-shifting comfort of the nine-speed automatic transmission is the result of extensive measures. These include the novel direct control system which enables short, barely perceptible gear changes. The combination of twin-turbine torsional damper and centrifugal pendulum technology in the torque converter ensures outstanding drive comfort. An additional, electric transmission oil pump is activated in start/stop operation, ensuring a basic supply to the control elements and actuators. The delay between the desire to move off and the vehicle's actual movement is reduced by the electric transmission oil pump.

The 9G-TRONIC's output shaft goes straight through to the transfer case. Its electronically controlled multiplate clutch allows a variable transfer of the drive torque from 0-100 percent (Torque on Demand) between the axles. This takes into account the driver's wishes and the selected drive program, and physical factors such as the current yaw rate or actual traction are also considered. These are used to continuously calculate the most favourable torque distribution, so as to transfer correspondingly more drive torque to the front axle via the multiplate clutch in the transfer case. The result is reliable and stable handling.

When moving off either forwards or in reverse, Torque on Demand ensures the best possible traction even on ice and snow. Here the controlled clutch acts like the centre differential lock in a traditional cross-country vehicle and distributes torque consistently to both axles. During dynamic driving manoeuvres such as driving slaloms, evasive action or cornering, on the other hand, the drive torque at the front axle is reduced to increase lateral stability at the front wheels. The new transfer case also has a positive effect on longitudinal dynamics and ride comfort, as the engine torque no longer needs to be reduced for the purposes of load reversal damping.

Character at the touch of a button: DYNAMIC SELECT

Like the suspension, the powertrain of the Mercedes-Maybach GLS can be adapted to the driver's requirements by selecting a drive program using the DYNAMIC SELECT switch. Here, too, the exclusive Maybach drive program has the task of optimising comfort in terms of noise and vibration levels. The program's settings focus on the engine and transmission and have been configured specifically for the chauffeur mode:

- Very flat accelerator curve for starting off smoothly
- Transmission tuning with fewer gearshifts for smooth driving
- Starting off in second gear
- No stop/start function.

The smooth control strategies used for the drive system here are also exceptionally energy-efficient. The Off-Road drive program is designed to provide excellent traction when driving off-road, e.g. on farm tracks, gravel, sand or similar. There is also a Sport program, which adapts the dynamic handling control and gearshift points for dynamic driving.

The new Mercedes-Maybach GLS

Driving assistance systems and safety

Bodyguard und Co-pilot

The new Mercedes-Maybach GLS comes with many of the latest-generation Mercedes-Benz driving assistance systems included as standard. The PRE-SAFE® systems, which can increase the effectiveness of the car's protective functions by initiating in some cases reversible measures prior to an accident, are comprehensive and state-of-the-art, too. Options include a package incorporating Active Stop-and-Go Assist and PRE-SAFE® Impulse Side. One of the stand-out features of the Executive seat in the Mercedes-Maybach is the cushion airbag in the seat cushion. In the event of a frontal impact, it is designed to stop the rear passenger from sliding under the belt when the seat is in the reclined position. The cushion airbag restrains the passenger as effectively as possible in the pelvic area and in this way boosts the restraint effect of the three-point seat belt equipped with inertia-reel tensioners and belt force limiters.

The following assistance systems are installed as standard:

- Active Distance Assist DISTRONIC
- Active Speed Limit Assist
- Traffic Sign Assist
- Route-based speed adjustment
- Active Steering Assist with Active Lane Change Assist and "emergency corridor" functions
- Evasive Steering Assist
- Active Lane Keeping Assist
- Active Blind Spot Assist with exit warning
- Active Brake Assist with turning manoeuvre function and cross-traffic function
- PRE-SAFE® PLUS

The assistance systems fitted as standard in the Mercedes-Maybach GLS can assist the driver in many driving tasks and thus enhance comfort and safety. The car can autonomously maintain its speed and the distance to the vehicle in front as well as stay in lane on multi-lane roads. But it can also reduce the vehicle speed autonomously according to the traffic situation, e.g. when approaching towns or villages, bends, roundabouts, junctions, or even traffic tailbacks.

Its assistance systems can warn the driver if the GLS gets too close to the vehicle in front or if there is a risk of a collision while also monitoring the blind spot, even when the GLS is stationary before the occupants get out, as well as the adjacent lane ahead of, beside and behind the vehicle when changing lanes to overtake. If the driver fails to react, having being warned of the risk of a collision, the Active Brake Assist can initiate emergency braking autonomously. In this case, it can even react to pedestrians and cyclists and when turning ahead of oncoming traffic. If the driver is no longer guiding the vehicle when Active Distance Assist DISTRONIC is activated, the vehicle can detect this and give the driver signals. If the driver fails to react, the vehicle can even stop itself autonomously. It warns the traffic behind and can make an emergency call. This measure is important for medical emergencies, which is why the vehicle is also then unlocked to afford access for first-aiders. In the speed range from 20 to 70 km/h, the Evasive Steering Assist can assist the driver with manoeuvring to avoid a pedestrian in a hazardous situation by using camera and radar images to precisely calculate steering torque and then applying this torque to support the movement of the steering wheel.

The standard-fit Parking package with 360° camera is designed to assist with everyday manoeuvres: Four networked close-range cameras in the radiator grille, in the tailgate and in the exterior mirror housings produce a 360° image which is shown vividly in different selectable views on the media display, making it easier to manoeuvre and park.

Additional option: Active Stop-and-Go Assist

Active Stop-and-Go Assist and PRE-SAFE® Impulse Side (see further below) are optionally available in a package as an additional assistance system. In traffic congestion, Active Stop-and-Go Assist can assist the driver at speeds of up to 60 km/h with high availability. It can maintain the distance to the vehicle in front autonomously, while repeatedly making the car stop and start off again. It complements the Active Steering Assist which can automatically help to form a 'rescue corridor' for emergency vehicles on multi-lane roads based on road markings and the vehicle in front.

PRE-SAFE® for enhanced occupant protection

For many years PRE-SAFE®, the preventive occupant protection system, has supplemented the classic design measures at Mercedes-Benz. The result is comprehensive protection that starts before an accident and is still effective after the accident. The extensive driving assistance systems, as well as the sophisticated crash sensor system, enable PRE-SAFE® to recognise a likely impact in even more situations than before. The protective effect of the systems is

improved with a precisely coordinated response of the restraint systems and a number of other measures.

In this way PRE-SAFE® can now recognise an impending impact of a vehicle following behind by means of the radar sensors in the rear bumper and warn its driver with rapidly flashing hazard lights. At the same time, the PRE-SAFE® measures of the occupant protection systems are initiated. If the vehicle is stopped, the brakes are locked to keep it in place and reduce the forward jolt and thus the risk of whiplash and a secondary collision (PRE-SAFE® Plus).

In the new Mercedes-Maybach GLS, PRE-SAFE® can also protect the passengers in an area that often gets forgotten: the hearing. If a probable impact is detected, the standard-fit PRE-SAFE® Sound system transmits a noise signal through the sound system of the vehicle, which can trigger a reflex. It causes the stapedius muscle in the inner ear to contract and thus muffles the noise level of a major collision.

PRE-SAFE® Impulse Side, which is part of the optional Driving Assistance package Plus, uses the close-range radar sensors to detect an impending side-on collision, for example, in the event of accidents at junctions. As a preventive measure, PRE-SAFE® Impulse Side can inflate the air pocket in the outer bolster of the front seat on the side of the expected impact very quickly. It can prompt the driver or front passenger to move further away from the danger zone.

The new Mercedes-Maybach GLS

Production

Expertise for something special

As a member of the large SUV model series, the Mercedes-Maybach GLS is produced exclusively in Tuscaloosa, Alabama in the US. Since 1995 Daimler has invested more than six billion dollars in this location in the southern USA, and since 1997 it has produced well in excess of three million vehicles, of which two thirds were exported. The Mercedes-Benz SUV models GLS, GLE and GLE Coupé are also produced here, as is the C-Class Saloon for the North American market. A great deal of time and effort goes into producing the Mercedes-Maybach GLS with its exceptionally high-quality equipment and appointments.

A dedicated Mercedes-Maybach team produces the specific interior equipment and appointments by hand in a separate area. The team members, selected based on their skills and knowledge, were trained for this at the Mercedes-Maybach Manufaktur hand-finishing facility in Germany. Two team members are responsible for the complete finishing of each car, which takes place away from the assembly process for the other SUV models. Before and after these stations, the Mercedes-Maybach GLS models are sent to Mercedes-Benz SUV production for final acceptance.

The Mercedes-Maybach specialists assume a high level of personal responsibility and identify strongly with the product. Particular attention is paid to the careful handling of the high-grade interior appointments with a high proportion of nappa leather and wood trim parts. The entire process, from the production of these parts by the highly specialised suppliers to assembly by the specially trained team members to final acceptance, is geared towards achieving a flawless result.

Technical data

Mercedes-Maybach GLS 600 4MATIC

Engine

| | | |
|---------------------------------|--|--------------------------|
| Number of cylinders/arrangement | V8, 90° V angle, 4 valves per cylinder | |
| Displacement | cc | 3982 |
| Bore x stroke | mm | 83.0 x 92.0 |
| Rated output | kW/hp | 410/558 at 6000-6500 rpm |
| Rated torque | Nm | 730 at 2500-5000 rpm |
| EQ Boost | kW/hp (Nm) | 16/22 (250) |
| Compression ratio | 10.5: 1 | |
| Mixture formation | High-pressure injection | |

Power transfer

| | | |
|---------------------|-----------------------------|------|
| Drive system layout | Permanent all-wheel drive | |
| Transmission | 9G-TRONIC 9-speed automatic | |
| Gear ratios | Final drive ratio | 3.27 |
| | 1st gear | 5.35 |
| | 2nd gear | 3.24 |
| | 3rd gear | 2.25 |
| | 4th gear | 1.64 |
| | 5th gear | 1.21 |
| | 6th gear | 1.00 |
| | 7th gear | 0.86 |
| | 8th gear | 0.72 |
| | 9th gear | 0.60 |
| | Reverse gear | 4.80 |

Suspension

| | |
|----------------|--|
| Front axle | Double wishbone, air springs, single-tube gas-filled shock absorber, stabiliser bar |
| Rear axle | Multi-link suspension, air springs, twin-tube gas-filled shock absorbers, stabiliser bar |
| Braking system | Internally ventilated disc brakes all-round, electric parking brake, ABS, Brake Assist, ESP® |
| Steering | Electrically assisted rack-and-pinion power steering system |
| Wheels | Front: 9.5Jx22H2. Rear: 11.5Jx22H2 |
| Tyres | Front: 285/45 R 22. Rear: 325/40 R 22 |

Dimensions and weights

| | | |
|------------------------|----|--------------|
| Wheelbase | mm | 3135 |
| Track, front/rear | mm | 1699/1723 |
| Length | mm | 5205 |
| Width | mm | 2030 |
| Height | mm | 1838 |
| Turning circle | m | 12.52 |
| Boot capacity, VDA | l | 520 |
| Kerb weight acc. to EC | kg | 2785 |
| Payload | kg | 465 (to 575) |

| | | |
|---|----------|-----------------------------|
| Perm. GVW | kg | 3250 (to 3360) ¹ |
| Tank capacity/of which reserve | l | 90/9.0 |
| <u>Performance and fuel consumption</u> | | |
| Acceleration 0-100 km/h | s | 4.9 |
| Top speed | km/h | 250 |
| Combined fuel consumption ¹ | l/100 km | 12.0-11.7 |
| Combined CO ₂ emissions ² | g/km | 273-266 |

¹ Figures for fuel consumption and CO₂ emissions are provisional and were determined by the technical service for the certification process in accordance with the WLTP test method and correlated into NEDC figures. EC type approval and a certificate of conformity with official figures are not yet available. Differences between the stated figures and the official figures are possible. More information about the official fuel consumption and the official specific CO₂ emissions of new passenger cars can be found in the publication "Leitfaden über den Kraftstoffverbrauch, die CO₂-Emissionen und den Stromverbrauch neuer Personenkraftwagen" ["Guidelines concerning the fuel consumption, CO₂ emissions and electricity consumption of new passenger cars"], available free of charge at all retailers and from the Deutsche Automobil Treuhand GmbH (www.dat.de).